

U.S. FISH AND WILDLIFE SERVICE - SPOTLIGHT SPECIES ACTION PLAN

Common Name: Bruneau Hot Springsnail

Scientific Name: *Pyrgulopsis bruneauensis*

Lead Region: Region 1, Portland, Oregon

Lead Field Office: Idaho Fish and Wildlife Office, Boise, Idaho

Species Information:

Background: The Bruneau Hot Springsnail is endemic to thermal springs and outflows that occur along 8 kilometers (5 miles) of the Bruneau River in southwest Idaho. The species has a temperature tolerance between 11-35° C (52-95 °F), and is normally found in flowing aquatic habitats.

Status: Endangered (January 25, 1993: 58 FR 5938-5946)

Recovery Priority Number: 2C

Recovery Plan: September 30, 2002

Most Recent 5-year Review: June 24, 2007

Other: N/A

Threats: The primary threat to the species is loss of its thermal spring habitats due to declining thermal groundwater levels from groundwater use.

TARGET: *Prevent species extinction* If the current rate of loss of geothermal spring habitats along the Bruneau River continues as it has since monitoring began in 1991, there will be no geothermal spring habitats remaining in as little as 20 years.

MEASURE: *Slow the rate of decline in groundwater levels and stabilize the number of occupied thermal spring habitats.* This can be accomplished through implementing various groundwater conservation measures, including improving the efficiency of existing irrigation systems by updating existing irrigation systems to reduce overall geothermal groundwater use or converting systems to cold water use

ACTIONS:

1. Implement conservation measures that reduce overall groundwater use from the geothermal aquifer that underlies the Bruneau-Grand View area to stabilize or increase geothermal spring outflows. (Bruneau Hot Springsnail Coordination Committee Members (*BHSSCC*))
2. Continue ongoing interagency cooperation and coordination the Bruneau Hot Springsnail Coordination Committee.
3. Implement annual Bruneau Hot Springsnail population and habitat monitoring program. (*USFWS*)
4. Implement monthly Well Monitoring Program. (*IDWR*).
5. Eradicate non-native invasive plants from the Bruneau River and Hot Creek. (*IDWR, with technical assistance from others*)
6. Seek long-term funding mechanisms for the Conservation Fund for the purpose of implementing BHSS conservation, monitoring and technical assistance programs.

Actions:

Action	Threat(s) Addressed	Responsible Party	Estimated Cost (\$)
Implement water conservation program to reduce use of groundwater	Loss of thermal groundwater	USFWS, NRCS, BSWCD, OSC, private landowners	variable
Convene quarterly BHSSCC Interagency Meetings	Interagency coordination to address ongoing BHSS conservation needs	BHSSCC	\$9,000/yr
Implement annual BHSS population and habitat monitoring	Monitor the status of the BHSS and its thermal spring habitats	USFWS	
Continue monthly Well Monitoring Program	Monitor the status of groundwater levels	IDWR	
Eradicate non-native aquatic plants (i.e., hydrilla, water lettuce)	Remove invasive plants that likely impact BHSS thermal habitat quality	IDWR, others	
Seek long term funding for the BHSS Conservation Fund	Implementing water conservation projects is expensive, and some projects require large budget outlays to implement	BHSSCC	variable

Role of other agencies: State, Local, and Federal Agencies, as well as private landowners in the Bruneau area, will remain critical partners for identifying, implementing and monitoring conservation action on behalf of the endangered Bruneau Hot Springsnail. The State of Idaho continues to play a key role in interagency coordination through the Bruneau Hot Springsnail Coordination Committee. The Committee is comprised of staff representing the State of Idaho (Office of Species Conservation, Idaho Department of Fish and Game, Idaho Department of Water Resources, Idaho Department of Agriculture), Service, Natural Resources Conservation Service (NRCS), and the Bruneau Soil and Water Conservation District.

State of Idaho: Oversees Interagency Coordination activities.

Governor's Office of Species Conservation: Interagency Coordination, Technical Assistance

Idaho Department of Water Resources: Conducts monthly groundwater well monitoring in the Bruneau area.

Idaho Department of Fish and Game: Fisheries Management, Technical Assistance

Idaho Department of Agriculture: Invasive Species management

Bruneau Soil and Water Conservation District: Technical Assistance and Project Management

NRCS: Farm Bill Oversight, Technical Assistance, Cost-share funding

USFWS: Recovery Manager, Technical Assistance, Cost-share funding

Others: Idaho Power Company (Irrigation Efficiency Program), Simplot Family Trust (Irrigation Conversion), local area landowners

Role of other ESA programs: BHSS recovery is dependent upon interagency coordination and annual funding of recovery projects. We use the following ESA programs for implementing BHSS Recovery.

Recovery Funding (1113);

Section 6 Cooperative Endangered Species Conservation Funds: Habitat Conservation Planning Assistance Grants, Recovery Land Acquisition grants. These are all potential funding source programs.

Role of other FWS programs: The Partners for Fish and Wildlife Program is represented on the Committee, and provides variable levels of funding to the Conservation Fund.

Conservation Actions - Estimated Costs - 5 Year Outlook										
Action	2010		2011		2012		2013		2014	
	USFWS	TOTAL	USFWS	TOTAL	USFWS	TOTAL	USFWS	TOTAL	USFWS	TOTAL
1. Implement water conservation projects	\$30,000		\$35,000		\$40,000		\$45,000		\$50,000	
1. Cost-share with BSWCD for Technical Assistance	\$5,000		\$7,500		\$7,500		\$9,000		\$9,000	
3. Conduct annual BHSS population and habitat monitoring	\$9,000*		\$9,300*		\$9,630*		\$9,990*		\$10,320*	

*: indirect costs attributable to # of staff bio-days necessary to complete annual monitoring and reporting.